

3736



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	)	Examiner: Unknown
J. YANOF, et al.	)	
Serial No.: 09/990,518	)	Art Unit: 3736
Filed: November 21, 2001	)	Confirmation: 3075
For: METHOD OF REVIEWING	)	
TOMOGRAPHIC SCANS WITH	)	
A LARGE NUMBER OF IMAGES	)	
Attorney Docket No.:	)	Cleveland, OH 44114
PKRZ 2 00718	)	May 12, 2003

37 CFR 1.97(b)(3)&(c)(1)  
INFORMATION DISCLOSURE STATEMENT

RECEIVED

MAY 19 2003

Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TECHNOLOGY CENTER

Dear Sir:

The applicants are now in receipt of the PCT Search Report of April 28, 2003 from the European Patent Office in connection with the corresponding PCT patent application. Copies of the Search Report and the cited references are enclosed. The applicants also enclose a form PTO-1449 listing the cited references for the Examiner's convenience. An early indication that the cited references have been considered is requested.

For many years, CT scanners have been used to generate images of a volume of a patient, such as a 10-12" axial portion of the patient's torso. CT scanners have now become so precise that this 10-12" section can be imaged with slices that are 1 mm thick or less, i.e., over 350 slice images. The present application addresses a technique for making these hundreds of images more manageable, while still providing for a complete examination.

A selected number, e.g., 4 or 8, of the thin slices are combined together to create a smaller number of thick slices. This combination can be by any of a variety of summing techniques including maximum intensity projection, averaging, and the like. Typically, the radiologist pages through these thicker slices in order from the head end of the section to the

other. Whenever the radiologist notes something of concern in one of the thick images, or reaches a region of particular concern, or reaches a region which hospital protocol requires to be examined with the thinnest available images, or the like, the radiologist double-clicks on the displayed slice. This double-click brings up the selected number of thin slice images (e.g., 4 or 8) on another display or part of the display. In this manner, the radiologist can review thicker slices with a thickness similar to the thickness which had been traditionally viewed for years but, where appropriate, can examine much thinner slices. The processor can also examine each thick slice for imaged structures that are smaller than the thickness of the thicker slice and highlight those on the thicker slice, such as with color enhancement.

None of the references from the European Search Report are concerned with solving this over-abundance of information problem, much less propose the present solution.

**37 CFR 1.97(e)(1) Statement**

Each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

An early allowance of all claims is requested.

Respectfully submitted,

FAY, SHARPE, FAGAN,  
MINNICH & MCKEE, LLP

A large, stylized handwritten signature in black ink, which appears to read "Thomas E. Kocovsky, Jr.", is written over the printed name and address.

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CERTIFICATE OF MAILING

I hereby certify that this **INFORMATION DISCLOSURE STATEMENT, FORM PTO-1449 AND REFERENCES** in connection with U.S. Patent Application Serial No. 09/990,518 are being deposited with the United States Postal Service as first class mail in an envelope addressed to: MAIL STOP: \_\_\_\_\_, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 12<sup>th</sup> day of May, 2003.

By: Hilary McNulty



Subst. Form PTO-1449  APPLICANT'S(S') INFORMATION DISCLOSURE STATEMENT	Atty. Dkt No.: PKRZ 2 00718	Serial No.: 09/990,518
	Applicant(s): YANOF, et al.	
	Filing Date: 11/21/2001	Group: 3736

## U.S. PATENT DOCUMENTS

Initial *		Document No.	Date	Name	Class	Subcl.	Filing Date
	AA	5,570,404	10/29/96	Liang, et al.	378	8	09/30/1994
	AB						
	AC						

## FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subcl.	Translation ?
	AD	WO 01/26052 A1	04/12/01	PCT			
	AE	WO 02/056240A1	07/18/02	PCT			
	AF						
	AG						
	AH						
	AI						

## OTHER ART

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	AK		

Examiner:

Date Considered:

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication to applicant.

## CERTIFICATE OF MAILING

I hereby certify this INFORMATION DISCLOSURE STATEMENT, FORM PTO-1449, AND 3 REFERENCES in connection with U.S. Patent Application Serial No. 09/990,518 are being deposited with the United States Postal Service as first class mail in an envelope addressed to: MAIL STOP: \_\_\_\_\_, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 12<sup>th</sup> day of May, 2003.

By: Silary McNulty